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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,344	03/12/2007	Seiji Satoh	S1459.70171US00	2097
23628 7590 12/17/2008 WOLF GREENFIELD & SACKS, P.C. 600 ATLANTIC AVENUE BOSTON, MA 02210-2206				
EXAMINER				
MA, TZE				
ART UNIT		PAPER NUMBER		
2628				
MAIL DATE		DELIVERY MODE		
12/17/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/553,344

**Applicant(s)**

SATO ET AL.

**Examiner**

TIZE MA

**Art Unit**

2628

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1.5-18, 20-23 and 25-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1.5-17 and 27-34 is/are allowed.
- 6) ☒ Claim(s) 18, 20-23, 25-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments, filed 10/01/2008, with respect to the rejections of claims 1-6, 16-17, 27 under 35 U.S.C. §102 and rejections of claims 7-15 and 28-29 under 35 U.S.C. §103 have been fully considered and are persuasive. The rejections of the claims have been withdrawn. The amended independent claims 1 and 27 are allowed. The dependent claims 5-17, 28-34 are also allowed.
2. Applicant's arguments with respect to the rejections of claims 18-26 under 35 U.S.C. §102 have been considered but are moot in view of the new ground(s) of rejection. The amended claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai, and in view of Abrams (US. Pub. 2003/0156188 A1). The dependent claims 20-23, 25-26 also remain rejected.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 18, 20-23, 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai (US. Pub. 2002/0030675 A1), and in view of Abrams (US. Pub. 2003/0156188 A1).

6. Regarding claim 18, Kawai teaches a stereoscopic-vision image providing method for providing data of a stereoscopic-vision image which is to be used to generate a stereoscopic-vision image, the method comprising:

generating, based on assumed display information describing at least an assumed display size of an assumed display unit on which the stereoscopic-vision image is to be displayed, a plurality of viewpoint images having a parallax with respect to each other (paragraph [0025], generating stereoscopic-vision image; paragraph [0068], composing left and right viewpoint images from two virtual cameras; paragraphs [0058] and [0059], Fig. 4, display device information, screen size);

storing the plurality of viewpoint images in a single data structure describing the stereoscopic-vision image (paragraph [0068], two-viewpoint stereoscopic images are generated and rendered. The rendering process includes storing, at least temporarily.); and

additionally storing accessory information relating to the assumed display unit on which the stereoscopic-vision image is desired to be displayed, the accessory

information comprising the assumed display size of the assumed display unit (paragraph [0065], display device information, including display size, is stored.) .

7. However, Kawai does not teach storing in the single data structure, together with data of the plurality of viewpoint images, accessory information relating to the assumed display unit.

8. Abrams, in the same field of endeavor, teaches storing 3-D video data with metadata in a single file (paragraph [0094]. The metadata is accessory information). Storing additional or accessory information about the video or image with the video or image data in a single file provides a portable manner for carrying the description information of the data with the data itself.

9. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method as shown in Kawai by storing generated image data with the display information in a single file or a data structure on the display device so that regeneration is unnecessary when viewing the image again and the portability is provided.

10. Regarding claim 20, Kawai teaches wherein the assumed display information comprises information about a type of the assumed display unit (paragraph [0059], Fig. 4, the display device information contains device type).

11. Regarding claim 21, Kawai teaches wherein in the assumed display information, the assumed display information comprises information for displaying the stereoscopic-vision image in a portion of the assumed display unit (paragraph [0059], Fig. 4, the

display device information contains screen size, e.g., diagonal length in inches. The size information is used for displaying the stereoscopic-vision images).

12. Regarding claim 22, Kawai teaches wherein in the assumed display information, the assumed display information comprises information for displaying the stereoscopic-vision image in a portion of the assumed display unit (paragraph [0059], Fig. 4, the display device information contains screen size, e.g., diagonal length in inches. The size information is used for displaying the stereoscopic-vision images).

13. Regarding claim 23, Kawai teaches comprising: controlling a display size of the stereoscopic-vision image based on at least the assumed display information (paragraph [0059], Fig. 4, paragraph [0064], generating image generation information on the basis of the display device information).

14. Regarding claim 25, Kawai teaches wherein the stereoscopic-vision image is composed of a right-viewpoint image and a left-viewpoint image having a parallax with respect to each other (paragraph [0068], composing left and right viewpoint images from two virtual cameras. Also, Figs. 18A-E).

15. Regarding claim 26, Kawai teaches wherein the right-viewpoint image and the left-viewpoint image are managed as one combined image and the assumed display information is managed as tag information of the combined image (paragraph [0081], combining two images; paragraph [0077], adding display device information during the process).

***Allowable Subject Matter***

16. Claims 1, 5-17, 27-34 are allowed.

17. The following is an examiner's statement of reasons for allowance:

The claimed invention is directed to a stereoscopic-vision image processing apparatus and method comprising comparing actual display information for a first display unit on which the stereoscopic-vision image is to be displayed, the actual display information describing at least an actual size of the first display unit, and assumed display information for the stereoscopic-vision image, the stereoscopic-vision image comprising a plurality of viewpoint images at least having a parallax with respect to each other and the assumed display information describing at least an assumed size of a second display unit on which the stereoscopic-vision image, when created, was intended to be displayed; determining, based on the comparing, whether the stereoscopic-vision image can be displayed on the first display unit with a parallax within a threshold parallax tolerance. The prior arts failed to show the claimed features.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Conclusion***

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIZE MA whose telephone number is (571)270-3709. The examiner can normally be reached on Mon-Fri 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao M. Wu can be reached on 571-272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tm

/XIAO M. WU/  
Supervisory Patent Examiner, Art Unit 2628